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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/699,680

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Hyo Sig Jean

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EXAMINER

CASCA, FRED A

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/699,680	Applicant(s) JEAN, HYO SIG	
	Examiner FRED A. CASCA	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-16 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15,16,18 and 19 is/are allowed.
- 6) ☒ Claim(s) 1,3-14 and 20-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on April 07, 2008. Claims 1, 3-16 and 18-29 are still pending in the present application. **This Action is made FINAL.**

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3-14 and 20-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent claims 1, 7 and 20 have been amended to include the phrase "without referring to protocol revision information". There is insufficient explanation of what the protocol revision information is and how the protocol revision information works. Paragraph 44 of the specification merely mentions the same phrase without any further explanations. Without additional guidance, there would be undue experimentation as to what a protocol revision information is and how a dormant function takes place without referring to it.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 3-14 and 20-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 7 and 20 have been amended to recite the limitation “without referring to protocol revision information”.

Regarding claims 1, 7 and 20, it is not clear what a protocol revision information is and how it works with processing a dormant function. Paragraph 44 of the specification merely mentions the phrase “protocol revision information” without any further explanations.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-10, 12, 14 and 20-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Julka et al (US 2004/0063431 A1) in view of Lioy et al (US 6,424,639 B1) and further in view of Riedel et al (US 7,289,453 B2).

Referring to claim 1, Julka discloses a dormant control system in a packet data service network (abstract and figures 1-3B) comprising a mobile station that provides information indicating whether the mobile station supports a dormant function using a message (Figures 1-3B

and paragraph 8); and a base station controller that receives the message after receipt of a mobile origination message from the mobile station (figures 1-3B, and paragraphs 30, 33, 35, 36, “mobile station 40, which is associated with multiple dormant packet data service instances, detects a change of PZID, SID or NID”, note that sending an origination message as a first step by the mobile station in processing a dormant handoff is inherent in CDMA2000) and determines whether to conduct the dormant function without referring to protocol revision information (paragraph 14, 35-37, and figures 1-3B, “BSC”, “recognize that the mobile station has additional packet data service instances requiring additional dormant handoffs”. Note there is no mention of referring to any protocol revision information in Julka), the base station controller determining whether to conduct the dormant function based on service option information of the mobile station and dormant control information included in the message received from the mobile station (figures 1-3B, and paragraphs 14, 30, 33-43, “responsive to recognizing that the mobile station 40 has multiple service instances associated with it, BSC 20 determines whether to allocate a traffic channel to the mobile station 40 to improve the efficiency of dormant handoff based on the number of service instances of the mobile and other information”, note that service option information is information referring to the number of service instances by the mobile station. Further note that dormant control information is the dormant handoff request from the mobile station for a first packet data service instance).

Julka does not specifically disclose conducting dormant function based on a state of a dormant timer, in the format claimed by applicant.

Lioy discloses conducting a dormant function based on a dormant timer (col. 6, lines 35-67, particularly line 41, “when a dormant timer provided within wireless communication device

14 expires (in CDMA 2000, such a timer is maintained at the SC/MS and the mobile is told by a signaling message when to go to the dormant mode)").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Julka by incorporating the teachings of Lioy into that of Julka in the format claimed by applicant, for the purpose of limiting the frequency of activation, thus limiting signaling overhead.

The combination of Julka/Lioy does not specifically disclose using a specific message such that the specific message includes the service option information, a state of a dormant timer and dormant control information as claimed.

However, using of such specific message is well known in the art. Particularly, such specific message is referred to as the header, or the over header.

In a similar field of endeavor, **Riedel** discloses using such header in transmitting control information (Figures 5-9, 17, 19-20, 24 and 32, and col. 6, lines 10-35, "control information in the IP packet header").

It would have been obvious to a person of ordinary skill in the art to modify the combination in the format claimed for the purpose of providing an efficient communication system.

Referring to claim 3, the combinations of Julka/Lioy/Riedel disclose the dormant control system according to claim 1, and further disclose the specific message indicates whether the mobile station supports the dormant function or not based on information included in a field that is not used otherwise in said specific message (Julka, par 18, note that when an indication in a

channel is not mentioned about an information then the channel (field) is inherently non used).

Referring to claim 4, the combinations of Julka/Lioy/Riedel disclose the dormant control system according to claim 1, and further disclose the message is one of a service connect complete message received from the mobile station or a mobile station's state response message that is provided in response to the state request message of the base station controller (Julka, figures 1-3B and paragraphs 29-31).

Referring to claim 5, the combinations of Julka/Lioy/Riedel disclose the dormant control system according to claim 1, and further disclose the specific message is a separate notice message concerning dormant function support through which the mobile station indicates whether the mobile station supports the dormant function or not (Julka, figures 1-3B, and paragraphs 29-33).

Referring to claim 6, the combinations of Julka/Lioy/Riedel disclose the dormant control system according to claim 1, and further disclose the base station controller comprises a call control processor (CCP) that transmits information related to dormant control and service option information of the mobile station if a mobile origination message is received from the mobile station through the base station transceiver subsystem (Julka, figures 1-3B, note that a call control processor in the control unit of a packet data network is inherent); and a selection and distribution unit (SDU) that reviews the service option information and timer information received from the CCP, and if the packet data service option is indicated in the received information prepares for determination of whether the mobile station supports the dormant

function, generates a service connection message (Julka, figures 1-3B, paragraphs 31-35 and 40 and 54) and transmits the service connection message to the mobile station, upon receiving the specific message from the mobile station and confirming the information on whether the dormant function is supported, drives the dormant timer, and upon determining whether the mobile station supports the dormant function by confirming the driving of the dormant timer in the active/connected state, conducts the dormant function (figures 1-3B, and paragraphs 31-35 and 40 and 54).

Referring to claims 7-10 and 12, claims 7-10 and 12 define a dormant control method reciting features analogous to the features of the dormant control system of claims 1-5 respectively (as rejected above). Thus, the combinations of Julka/Lioy/Riedel disclose all elements of claims 7-10 and 12 (please see the rejection of claim 1-5 above).

Claim 20 defines a method for managing call processing in a packet data service network reciting features analogous to the features of the dormant control system of claim 1 (as rejected above). Thus the combinations of Julka/Lioy/Riedel disclose all elements of claim 20 claim (please see the rejection of claim 1 above).

Referring to claim 21, the combinations of Julka/Lioy/Riedel disclose the method of claim 20 and further disclose the dormant function is provided without determining a protocol of the mobile standard of the mobile station (see rejection of claim 1 and note that there is not any determining of a protocol of the mobile standard of the mobile station).

Referring to claim 22, the combinations of Julka/Lioy/Riedel disclose the method of claim 20 and further disclose receiving service option information form the mobile station; and determining whether the mobile station supports the dormant function if the service option

information indicates a predetermined types of service (figures 1-3B, and paragraphs 14 and 25-31).

Referring to claim 23, the combinations of Julka/Lioy/Riedel disclose the method according to claim 22, and further disclose the predetermined type of service is a packet data service (paragraphs 14 and 24-23).

Referring to 24, the combinations of Julka/Lioy/Riedel disclose the method according to claim 23, and further disclose accessing the information in said message indicating whether the mobile station supports the dormant function in response to the determining step (Julka, please see the rejection of claim 1).

Referring to claim 25, the combinations of Julka/Lioy/Riedel disclose the method according to claim 20, and further disclose the message is a pre-existing message transmitted in the network, and the information indicating whether the mobile station supports the dormant function is included in a predetermined field of the pre-existing message (Julka, paragraphs 32, 31 and 8).

Referring to claim 26, the combinations of Julka/Lioy/Riedel disclose the method according to claim 25, and further disclose the field is an unused field or a reserved field of pre-existing message (Julka, paragraphs 8, 31-32).

Referring to claim 27, the combinations of Julka/Lioy/Riedel disclose the method according to claim 26, and further disclose the message is a service connect complete message (Julka, figures 1-3B and paragraphs 28-34).

Referring to claim 28, the combinations of Julka/Lioy/Riedel disclose the method of claim 26 and further disclose the message is a state response message to a state request message issued from a base station controller (Julka, paragraphs 8, 24-29, 31-3).

Referring to claim 29, the combinations of Julka/Lioy/Riedel disclose the method of claim 20 and further disclose the message is special message created to indicate mobile station supporting the dormant function (Julka, please see rejection of claims 1 and 20).

Referring to claim 14, the combinations of Julka/Lioy/Riedel disclose the dormant control method according to claim 7, and further disclose provision of the dormant function comprises analyzing at the base station controller dormant support information within the certain message received from the mobile station (Julka, figures 1-3B, and par 24-29), if it is determined that the mobile station supports the dormant function (figures 1-3B, and par 26-29) requesting at the base station controller for interface registration in order to transmit sighting information to a PDSN, receiving a response thereto and then notifying the mobile switching center of completion of the resource assignment; establishing a PPP connection between the mobile station and the PDSN and conducting a mobile IP registration procedure, thereby transmitting and receiving packet data in an active/connected state (figures 1-3B, note that requesting is inherent).

Lioy additionally discloses driving at the base station controller the dormant timer (col. 6, lines 35-67).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Julka as claimed, for the purpose of limiting overhead signaling.

8. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Julka (US 2004/0063431 A1) in view of Lioy et al (US 6424639 B1) in view of Riedel et al (US 7289453 B2) and further in view of well known prior art (MPEP 2144.03).

Referring to claim 11 and 13, the combination of Julka/Lioy/Riedel discloses the dormant control method according to claim 10 and 12.

The combination does not specifically disclose the specific field for transmission, reception and confirmation messages as described by the applicant.

However, it is well known in the art, particularly in packet transmission via frames, that frames include such information fields for the benefit of confirming message transmission and therefore efficient communication.

Thus, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify the combo by the teachings of prior art for the purpose of providing an efficient communication system.

Allowable Subject Matter

9. Claims 15, 16 and 18-19 are allowed.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3-14 and 20-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Harper, can be reached at (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617